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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,043	07/31/2003	Michael G. Pope	13539US03	9645

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EXAMINER

RINEHART, KENNETH

ART UNIT	PAPER NUMBER
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3749

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/632,043	Applicant(s) POPE, MICHAEL G.	
	Examiner Kenneth B Rinehart	Art Unit 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) 1-6, 13-17 and 24-59 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-12 and 18-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/20/03, 07/31/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-6, 13-17, drawn to a gasification system, classified in class 122, subclass 5.
- II. Claims 7-12, 18-23 drawn to a gasification reactor chamber, classified in class 110, subclass 229.
- III. Claims 24-53, drawn to a closed loop municipal solid waste gasification system, classified in class 110, subclass 233.
- IV. Claims 54-59, drawn to a method for gasification of solid municipal solid waste, classified in class 110, subclass 341.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and IV are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process such as soil remediation.

Inventions II and IV are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process such as soil remediation.

Art Unit: 3749

Inventions III and IV are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process such as soil remediation.

Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination has achieved a separate classification in the art. The subcombination has separate utility such as gas producer for SNG or reformed steam.

Inventions III and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination has achieved a separate classification in the art. The subcombination has separate utility such as a gas producer for SNG or reformed steam.

Inventions III and I are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the

Art Unit: 3749

subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination has achieved a separate classification in the art. The subcombination has separate utility such as remediating combustion products from a furnace.

During a telephone conversation with Mr. Schodde on 3/25/04 a provisional election was made with traverse to prosecute the invention of Group II, claims 7-12, 18-23. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-6, 13-17, 24-59 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Information Disclosure Statement

The information disclosure statement filed 7/31/03 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered. References DT-2432504, DE 2639165, DE 4030743, and EP 0173628 do not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the interior chamber includes at least one inclined surface, the at least one inclined surface having a first portion and a second portion,

Art Unit: 3749

the first portion being operably connected to the plurality of sidewalls, the at least one inclined surface having an inward inclination from the first portion toward the second portion, the second portion being operably connected to at least one of the at least one disposal opening must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-12, and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnes in view of Rotter. Barnes discloses an interior chamber, the interior chamber having a top, a bottom, and a plurality of sidewalls, the interior chamber configured to receive and gasify a plurality of feed stock material (26, 27, fig. 1); an outer shell, the outer shell configured to encompass at least a portion of the plurality of sidewalls and at least a portion of the top of the interior chamber (33, fig. 1), at least one layer of insulative material, the at least one layer of insulative material being operably positioned between the plurality of sidewalls and the outer shell (col. 2, lines 64-70) at least one burner, the at least one burner operably connected to the interior chamber (30, 31, fig. 1); a plurality of process gas inlets operably connected to the interior chamber (46, fig. 2), at least two of the plurality of process gas inlets configured to share

Art Unit: 3749

a manifold, the manifold configured to allow the flow of gasification process gas through the plurality of process gas inlets (42, fig. 1); at least one vent, the at least one vent operably connected to the outer shell, the at least one vent configured to allow the passage of ambient air between the outer shell and the plurality of sidewalls (34, fig. 1), at least one perforated conduit, at least a portion of the perforated conduit being located inside the interior chamber, the perforated conduit being configured to transport a gasification process gas to the plurality of feed stock material (24, 25, fig. 1), the interior chamber is operably connected to a return air line, the return air line being configured to transport a plurality of recycled process gas (14, fig. 1), the at least one perforated conduit is an inner lining (24, 25, fig. 1), the interior chamber includes a liner, the liner being configured to permit the transport of a gasification process gas to at least a portion of the feed stock material (24, 25, fig. 1). Barnes discloses applicant's invention substantially as claimed with the exception of at least one access loading door operably connected to the gasification reactor chamber; and at least one disposal opening operably connected to the gasification reactor chamber, the interior chamber includes at least one inclined surface, the at least one inclined surface having a first portion and a second portion, the first portion being operably connected to the plurality of sidewalls, the at least one inclined surface having an inward inclination from the first portion toward the second portion, the second portion being operably connected to at least one of the at least one disposal opening, a perforated grate operably positioned inside the interior chamber. Rotter teaches at least one access loading door operably connected to the gasification reactor chamber; and at least one disposal opening operably connected to the gasification reactor chamber (L1, and 12C, fig. 1), the interior chamber includes at least one inclined surface (22, fig. 1), the at least one inclined surface having

Art Unit: 3749

a first portion and a second portion (upper portion of 22 and lower portion of 22, fig. 1), the first portion being operably connected to the plurality of sidewalls (fig. 1), the at least one inclined surface having an inward inclination from the first portion toward the second portion (fig. 1), the second portion being operably connected to at least one of the at least one disposal opening (12c, fig. 1), a perforated grate operably positioned inside the interior chamber (24, fig. 1) for the purpose of adding fuel and removing processed fuel. It would have been obvious to one of ordinary skill in the art to modify Barnes by including at least one access loading door operably connected to the gasification reactor chamber; and at least one disposal opening operably connected to the gasification reactor chamber, the interior chamber includes at least one inclined surface, the at least one inclined surface having a first portion and a second portion, the first portion being operably connected to the plurality of sidewalls, the at least one inclined surface having an inward inclination from the first portion toward the second portion, the second portion being operably connected to at least one of the at least one disposal opening as taught by Rotter for the purpose of adding fuel and removing processed fuel. Barnes in view of Rotter discloses applicant's invention substantially as claimed with the exception of the interior chamber has at least five sidewalls, the plurality of sidewalls form a cylinder. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to have a cylinder or five sidewalls because Applicant has not disclosed that the number of sidewalls or shape provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the number of sidewalls and shape of Barnes or

Art Unit: 3749

the claimed sidewalls and shape because both quantities of sidewalls and shapes perform the same function of processing material equally well.

Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of art with respect to apparatus in general: Osawa et al (3961587), Booth et al (5156097), Michel Kim (5026403).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth B Rinehart whose telephone number is 703-308-1722. The examiner can normally be reached on 7:30-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 703-308-1935. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KBR


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AU 3749